

32. IMPUTATION OF DATA

Short forms were used to obtain information for about 17 000 small establishments. In these forms less detail was obtained on selected items such as employment cost of supplies, fuels, electricity, and on the status of wells and drilling costs for oil and gas operations. Certain items were omitted entirely, such as man-hours.

To obtain industry totals estimates were prepared for detail omitted for such establishments on the basis of information reported on long forms for similar operations.

Imputation of missing items was made feasible by use of the Census Bureau's high-speed electronic computer. The procedures for imputation were of two types. For short-form respondents production, development and exploration workers and their wages were imputed from fixed ratios specified in advance from historical relationships of these items to total employees and total payroll. For other items (e.g. capital expenditures) the imputation was made on the basis of historical relationships of the items to value of shipments or other factors.

For industries characterized by large establishments the percentage of imputation of general measures such as employment and payrolls, cost of supplies, expenditures and the like is very small. For industries in which small establishments account for a large portion of the totals imputations may amount to 10 percent or more.

33. CONFIDENTIALITY OF DATA FOR INDIVIDUAL COMPANIES

The Bureau of the Census is prohibited by law from publishing any statistics

For each State not shown separately in table 2 of the industry chapter a footnote gives the number of establishments and either an employment range or the actual employment figure. The employment is shown in a range if the State had less than 1 000 employees and the employment data represented the total for only one or two companies or if the exact figure would permit deriving (by subtraction) the number of employees in other States represented by only one or two companies. In addition figures for States with less than 50 employees in general are shown only in the footnote together with the number of establishments and employment in a range.

In the Area Volume figures are not shown for a county or for an industry within a State if the publication of such statistics would disclose information for individual companies. In table 4 of that Volume, however, the number of establishments distributed by employment size is shown for every county by 3-digit industry group.

For industries with few establishments or considerable geographic concentration it has frequently been necessary to use geographic regions broader than the traditional nine census divisions in order to show all establishments by some geographic grouping. For this purpose the following combinations of Census divisions have been used:

NORTHEA

ST

SOUTH

South Atlantic
East South
Central
West South
Central

that disclose information reported by individual companies. In the 1962 census as in previous censuses precedence was given to geographic regions

and divisions over individual States in applying disclosure rules. Similarly States took precedence over counties. In tables showing industry detail major industry group (2-digit) totals were given precedence over industry group (3-digit) totals which in turn had precedence over individual (4-digit) industries.

Such order of precedence was used because (1) it was considered preferable to show regional data for an industry even at the cost of withholding data for another (usually the least important) State in a region rather than to show all publishable data for the individual States and group the disclosure States throughout the United States in an "all other" category as was frequently done in the 1939 and earlier censuses; and (2) by giving precedence to industry group statistics over individual industries within each State the extent to which individual statistics can be compared within the SIC industry classification framework is greatly increased.

NORTH CENTRAL WEST
East North Central
Mountain
West North Central Pacific

34. ABBREVIATIONS

The following abbreviations and symbols occur frequently in tables and footnotes:

	Zero
X	Not applicable
NA	Not available
n.e.c.	Not elsewhere classified
kwh	Kilowatt-hours
D	Withheld to avoid disclosing figures for individual companies
SIC	Standard Industrial Classification

Other abbreviations such as "lb" and "cwt" are used in the customary sense. Where the term "tons" is used alone it refers to short tons of 2,000 pounds; where the figures are expressed in tons of 2,240 pounds the unit of measure is specified as "long tons."